4.6 Reporting Strategy

4.6.1 Introduction

Reporting within the SCIES solution involves two major approaches. The first is to source data directly from the SCIES solution transactional system. This provides real-time data access but is limited from an analytical standpoint. There is also a performance cost involved with executing query-based processes against operational data. The second approach is to implement a separate data warehouse that contains offloaded data based on a predetermined schedule. A data warehouse will alleviate the performance concerns with operational data as well as provide more advanced tools for robust presentation and analysis of the content. A combination of these two approaches will be used to maximize the advantages of each. The SCEIS solution also provides the ability to create ad hoc as well as periodic reports that can be scheduled to run at predetermined intervals such as daily, weekly, or monthly.

All of the reporting requirements will have to be evaluated to determine the environment most suited to their individual needs. Some of them will require real-time data from the SCIES solution and others can be run against data stored in a data warehouse. This will determine the strategy for updating the data warehouse from the operational data store.

Assumptions

- The vast majority of the reporting work will be done in BW but this does not exclude the need for SCIES solution reporting of time-sensitive data on a limited basis.
- All the real-time reporting will be done with the SCIES solution.
- All SCEIS reporting needs will be satisfied using existing SCEIS solution tools with no additional purchases planned.

Recommendations

Implementing BEx Analyzer along with a specialized reporting/formatting solution, such as Crystal Enterprises, running on top of BW provides the flexibility and user friendliness to allow end users to maintain their own reports while also allowing static reports to be provided across the entire enterprise. This solution provides the ability to create web-enabled reports, report across multiple data sources, and provides feature rich formatting capabilities and ease of use for end users.

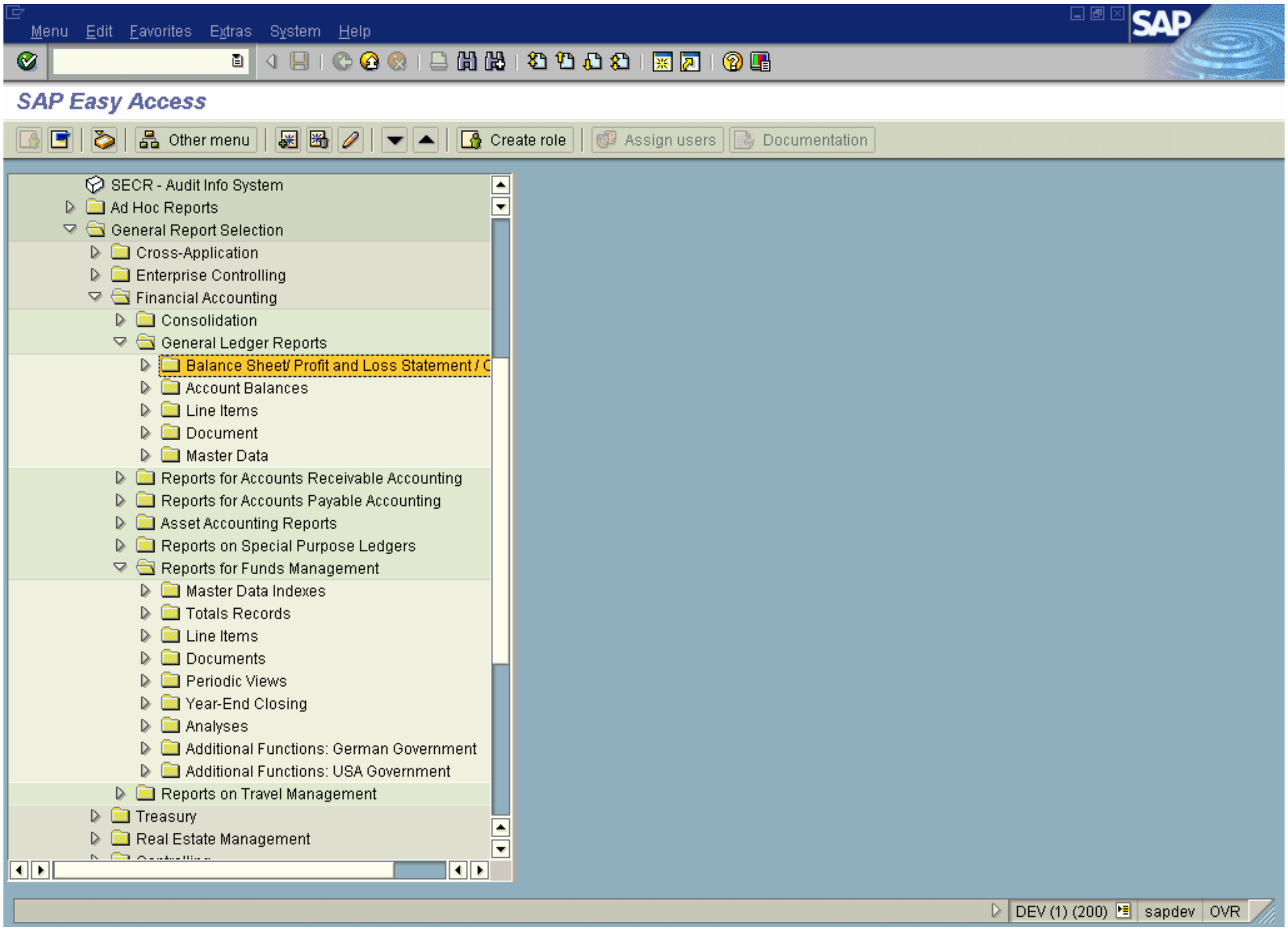
When evaluating different reporting strategies, there are several obvious factors to consider:

- Formatting flexibility.
- Web capability.
- Scalability as database size increases.
- Performance while executing reports.
- Query creation complexity.
- Data Integrity and Security.
- Batch processing.

General Report Selection

General Report Selection allows users to access business information in the SCEIS solution by starting reports or displaying pre-generated lists in report trees. Report trees are hierarchical structures that can contain standard SCEIS solution reports and/or user-defined reports, as well as lists generated by starting reports. In the SCEIS solution, there can be any number of report trees, and the nodes of each report tree can offer any number of reports and pre-generated lists.

Exhibit 4.6.1-1 Sample Report Selection



These reports can be simply executed as delivered or customized to more accurately address a particular reporting requirement. General Report Selection exposes a hierarchy of report trees across all functional areas such as Asset Accounting, Financial Accounting, Funds Management, Materials Management, etc. as well as Ad Hoc reporting primarily used as a quick and simple way of creating specific reports that, as a rule, are not needed more than once. Users can:

- Start reports online and in the background.
- Save lists generated by starting reports.
- Change the appearance of the report tree structure.

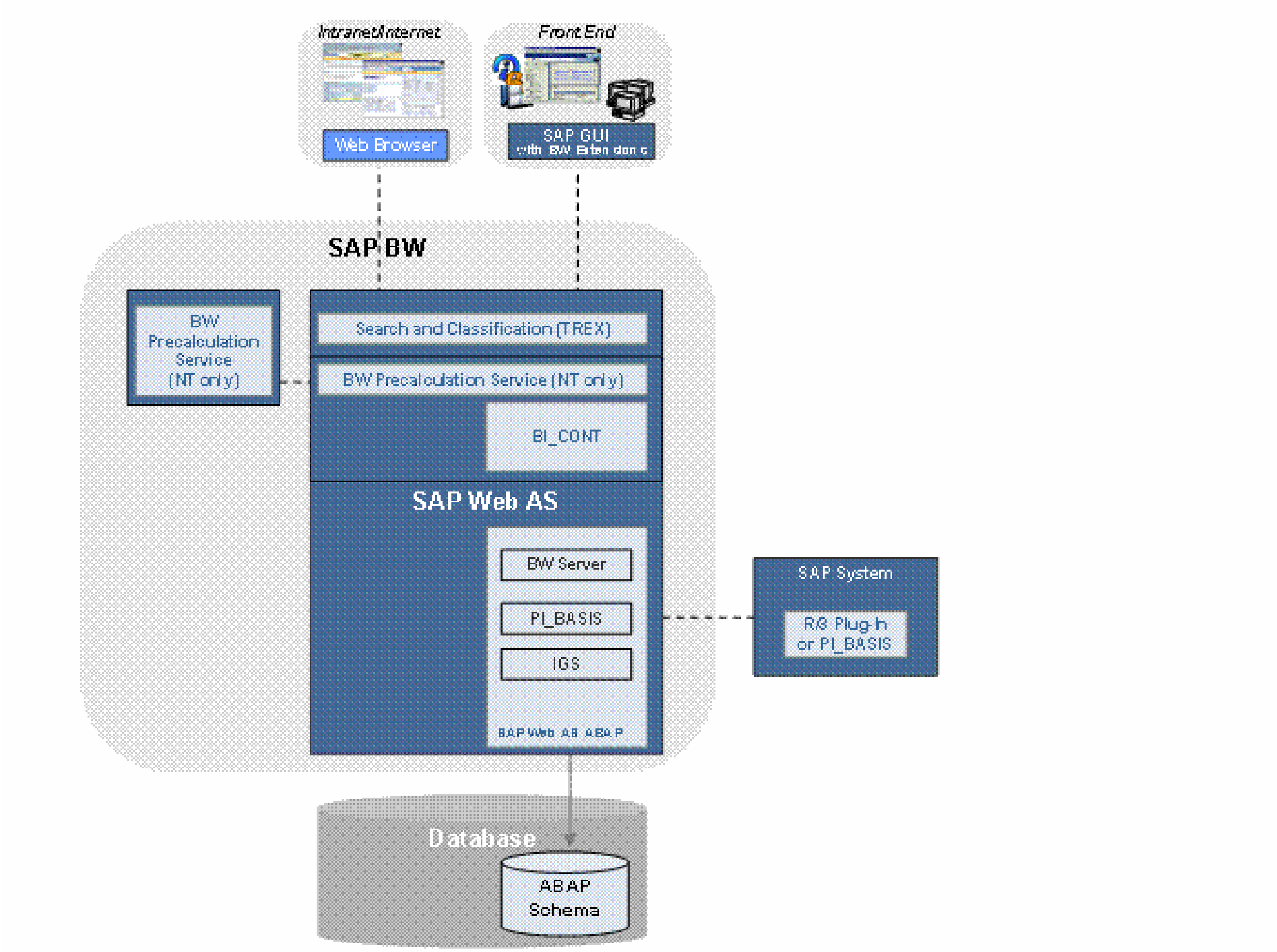
The SCEIS solution offers access to time-sensitive data but lacks many of the analytical tools found in the data warehouse environment. There will be a demand for time-sensitive data that can only be generated through the online solution but performance degradations issues must be balanced against these needs to ensure the impact to the transactional system is minimized.

Business Warehouse (BW)

Assuming the State's needs regarding real-time data remain relatively the same as the project moves forward, a BW based reporting system with nightly updates satisfies the vast majority of the reporting requirements. Data Warehousing with BW forms the basis of an extensive business intelligence solution to convert data into valuable information. For data from any source (SCEIS solution or non-SCEIS solution sources) and of any age (historic or current), Data Warehousing with BW allows:

- Integration (data retrieval from source systems)
- Transformation
- Consolidation
- Cleanup
- Storage
- Retrieval for analysis and interpretation

Exhibit 4.6.1-2 Business Warehouse System Landscape



4.6.2 Reporting Tools

ABAP

ABAP report programs can be created by developers in the ABAP Workbench and used to generate basic lists where users can select lines, or trigger commands with menu options, function keys, or pushbuttons, in order to display further information in one or more secondary lists. Batch ABAP programs can also be created to generate hardcopy reports when necessary.

Business Intelligence (BI) Java Software Development Kit (SDK)

With the BI Java SDK, developers can build analytical applications that access, manipulate, and display both multidimensional (Online Analytical Processing, or OLAP) and tabular (relational) data. The target audience is Java developers with business intelligence experience and needs.

Although the primary intention of the SDK is to simplify programming against the BW OLAP engine within a Java environment, the application programming interfaces (APIs) can also be used to access non-BW and even non-OLAP data sources, such as relational JAVA Database Connector (JDBC) data sources. This allows developers to work with a single uniform approach throughout development of an application.

Business Explorer (BEx)

In the Business Warehouse, BEx is the reporting tool used to work with data in the BW database. BEx has a web-based interface and is comprised of two components, the BEx Browser and the BEx Analyzer.

The BEx Analyzer is the analysis and reporting tool of the Business Explorer that is embedded in Microsoft Excel. When starting BEx Analyzer, the BEx toolbar appears in Microsoft Excel and allows access to all the important functions for navigating and analyzing the query data.

The BEx Browser provides an organized interface where a user can access and work with any type of document in BW, such as workbooks, links, and BW web reports.

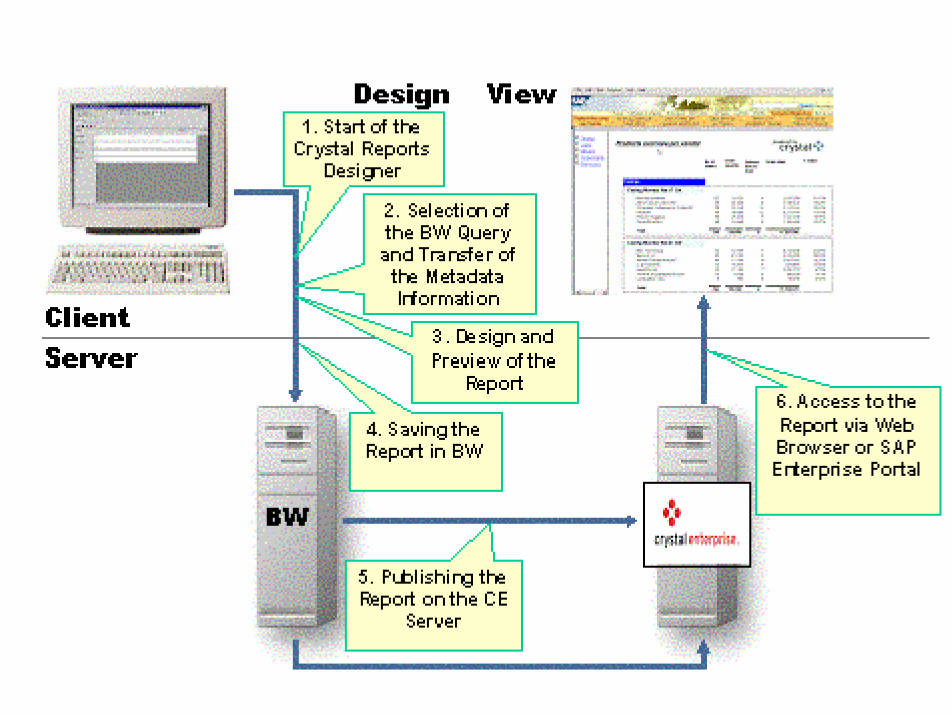
Depending upon the complexity, end-users as well as developers can use these tools to create reports.

Combining BW with Third Party Reporting Tools

BW provides a feature rich user-friendly query and reporting tool with BEx Analyzer that allows users to easily produce queries and generate reports in an Excel workbook format. These reports can be saved, distributed via email or published in a web format. There are some cases where BEx cannot meet specific formatting requirements. In this case, an additional third party reporting tool, such as Crystal Enterprise, will need to be implemented as a front end to the data warehouse.

There are also several other third party reporting packages that are also partnered with SAP to provide a comprehensive enterprise reporting solution that can be considered. Below is a sample design of what the reporting solution looks like:

Exhibit 4.6.2-1 Sample Reporting Solution Design



A schedule for offloading real-time data must take into consideration the daily reporting needs and attempt to balance those with performance issues. The current reporting strategy involves some ad hoc reporting done based on real-time data but the bulk of the reporting is done in batch based on a daily cycle of database updates. This is determined more by the limitations of the existing system than current needs and a more frequent reporting cycle may be required in the future. This will have to again be balanced against performance issues with respects to the operational database. End-user created reporting must also be tightly monitored for the same reason and this may involve restricting all end-user ad hoc reporting to archive data.

4.6.3 Determining Agency Reporting Requirements

The reporting requirements for the agencies included in the first rollout will need to be determined based on a set of criteria defined by the SCEIS technical team. The SCEIS functional teams will establish a dialogue with specific agency contacts and the SCEIS technical team will use this information to define and establish a specific reporting process for each of these agencies. Subsequent rollouts to new agencies can follow the same development path. The criteria used for these evaluations is defined as follows:

About the Report Requester

- Requester’s Name.
- Today’s date.
- Department/Team/Group/Cost Center.
- SCIES solution release for report development.
- Report user if different.
- Signature(s).
- E-mail address.
- Phone number.

About the Report

- Priority or need for this report.
- Date report needed by.
- Report name.
- Short description.
- What decisions might be made after using this report? Based on this decision, what SCIES solution functionality might be directly used?

Technical Specifications

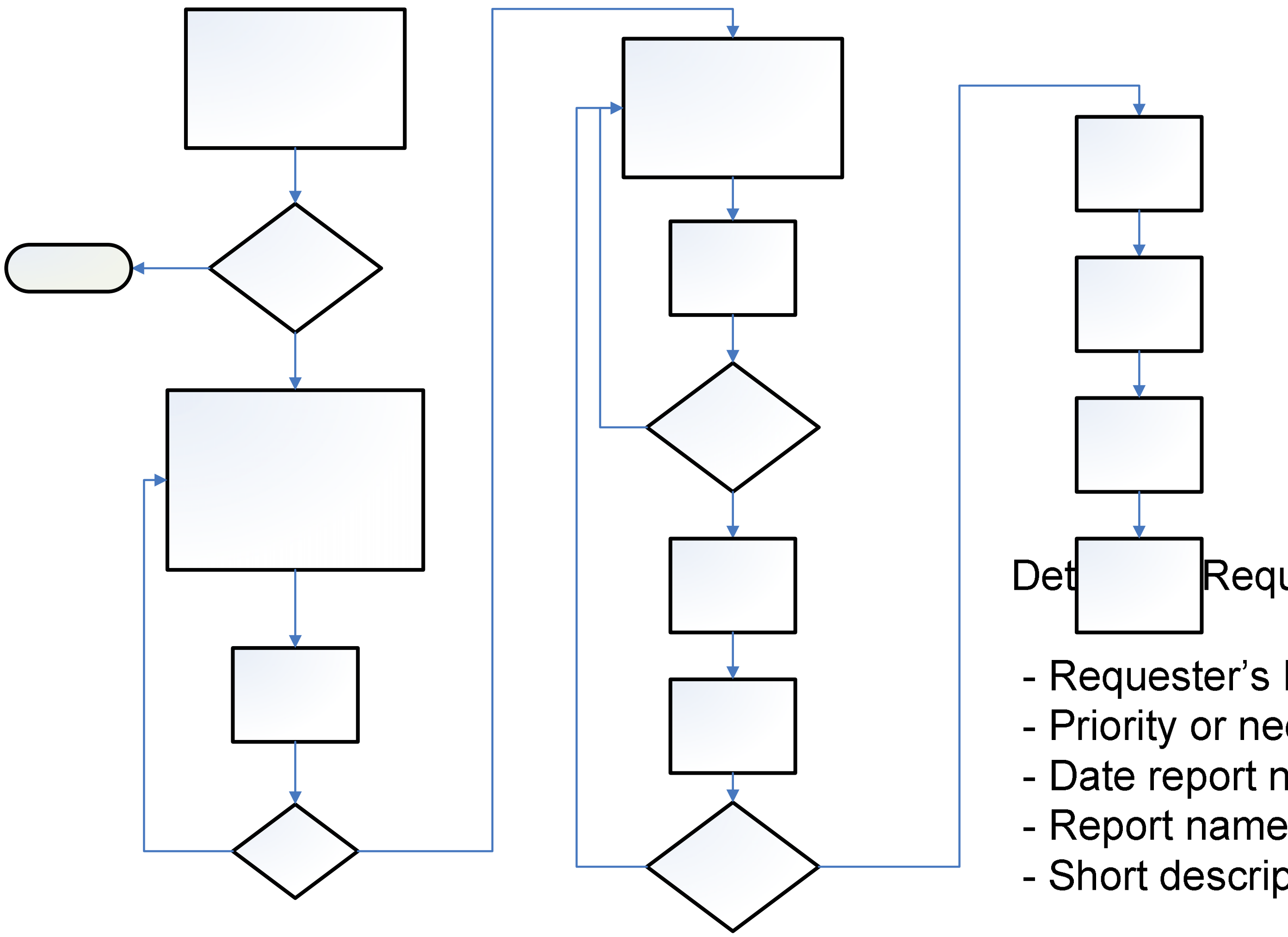
- Business data source(s).
- Known tables or fields..
- Similar reports already defined within the SCIES solution.
- Reporting tools evaluated: Based on your survey of the reporting tools, indicate:
  - Which reporting tools (for example, Report Painter, ABAP Query, etc.) have you considered?
  - Which reporting tool (if any) do you prefer more than the others?
  - In your view, are there any tools that are not appropriate for this report.

- Other resources: Have you considered any external resources (for example, OSS, ASUG, SAPnet) to find the report?
- Long description: Enter a detailed description of the report. Include the following information:
  - Business reason (or requirement) for the report.
  - Layout and screen information (for example, weekly, monthly, or quarterly data; column- and row-headings, and document data, etc.).
  - References to any legacy system reports considered from which this report can be found (with attachments, listings, or screenshots, if possible).

Other Technical considerations

- Authorization
  - Should restrictions be placed on who may use this report?
  - Should restrictions be placed on who may see the report output?
  - Should certain fields be hidden from certain users?
  - To get the report developed and approved is there a special method or procedure that should be used?
- Upgrades
  - Are there potential consequences of upgrading this report to a newer release of the SCIES solution?
  - Is the development of this report based on functional modules used in existing reports?
- Development considerations and notes
  - Are there special internal tables that need to be accessed?
  - Are there any other key people in the company who could offer additional information or perspectives on this report?
  - Would other divisions in the company need such a report?
  - Have other divisions in the company already created the same (or similar) report?

Exhibit 4.6.3-1 Report Request Flow



4.6.4 Standard Reports Identified for SCEIS Agencies

The following list provides a comprehensive view of the reports identified in each of the functional areas as standard reports needed for agency operations. The table defines the functional area in which the reporting need was identified, a basic report name, and a description of the report.

Exhibit 4.6.6.4-1 Baseline Report Needs from Blueprint Workshops

Functional Area	Report Name	Description	Standard Report/ InfoCube

Functional Area	Report Name	Description	Standard Report/ InfoCube
Comprehensive Annual Financial Report	Statement of Net Assets	This report provides the balance sheet for the annual financial statements on a statewide basis using the full accrual basis of accounting.	Custom Report
Comprehensive Annual Financial Report	Statement of Activities	This report provides the revenue and expenses and changes in net assets for the annual financial statements on a statewide basis using the full accrual basis of accounting.	Custom Report
Comprehensive Annual Financial Report	Balance Sheet – Major Funds – Governmental Funds	This report supports the modified accrual basis of accounting and includes columns for each major fund and a total column for the non-major funds.	Custom Report
Comprehensive Annual Financial Report	Statement of Revenues, Expenditures and Changes in Fund Balance – Governmental Funds	This report supports the modified accrual basis of accounting and includes columns for each major fund and a total column for the non-major funds.	Custom Report
Comprehensive Annual Financial Report	Reconciliation of Governmental Funds to Net Assets	This report reconciles the balance of governmental funds from the Balance Sheet – Governmental Funds to the Statement of Net Assets.	Custom Report
Comprehensive Annual Financial Report	Budgetary Comparative Schedules	Financial statements displaying the budgetary basis of accounting used by the State. The report includes the original budget, the final budget, the actual balances, and the variance of the final budget and actual balances. This report will be generated using Funds Management information.	Custom Report
General Ledger	Account Balances by Period	This report shows balance totals by period for a general ledger account or a group of general ledger accounts. Drilldown capability exists to go to the line items that make up the balances.	Display Balances
General Ledger	Detail Line Items for a General Ledger Account	This report shows a line item display for a general ledger account or a group of general ledger accounts. These items can be sorted or filtered based upon any of the business objects that are included in the individual line items.	Display Line Items

Functional Area	Report Name	Description	Standard Report/ InfoCube
General Ledger	Sales and Use Tax Details	This report details all taxes collected by user-defined parameters for Use Tax and Sales Tax.	Record of Use and Sales Taxes
General Ledger	Chart of Accounts Listing	This report lists out the complete chart of accounts based on user-defined parameters.	Chart of Accounts
Accounts Receivable	Customer Details	This report allows users to view customer master information. This view can be for accounting information or for sales information depending on the parameters selected.	Display Customer
Accounts Receivable	Changes to Customer Master Records	This report allows users to view customer master changes in a list format. This view is specific to accounting information changes only.	Display Customer Changes
Accounts Receivable	Balances Owed by Customer	This report shows balance totals by period for a customer or a group of customers. Drilldown capability exists to go to the line items that make up the balances.	Display Balances
Accounts Receivable	Detail Transactions by Customer	This report shows a line item display for a customer or a group of customers. These items can be sorted or filtered based upon any of the business objects that are included in the individual line items.	Display Line Items
Accounts Receivable	Customer Analysis	This report shows a line item display for a customer. The views that are available include postings to a sales area, special general ledger account, open items and any potential deductions.	Customer Analysis
Accounts Receivable	Customer History	This report details a customer's payment history for analysis.	Customer Payment History
Accounts Receivable	Customer Listing	This list produces a complete list of customer accounts and related fields. Users select which fields they want to see.	Customer List
Accounts Receivable	Aged Accounts Receivable	This report shows aged payables using user-defined parameters to populate the views.	Customer Aging

Functional Area	Report Name	Description	Standard Report/ InfoCube
Accounts Payable	Display Vendors	This report allows users to view vendor master information. This view can be for accounting information or for sales information depending on the parameters selected.	Display Vendor
Accounts Payable	Vendor Master Changes	This report allows users to view vendor master changes in a list format. This view is specific to accounting information changes only.	Display Vendor Changes
Accounts Payable	Outstanding Balance by Vendor	This report shows balance totals by period for a vendor or a group of vendors. Drilldown capability exists to go to the line items that make up the balances.	Display Balances
Accounts Payable	Vendor Line Items	This report shows a line item display for a vendor or a group of vendors. These items can be sorted or filtered based upon any of the business objects that are included in the individual line items.	Display Line Items
Accounts Payable	Vendor Listing	This list produces a complete list of vendor accounts and related fields. Users select which fields they want to see.	Vendor List
Accounts Payable	Vendor Aging Report	This report shows aged payables using user-defined parameters to populate the views.	Vendor Aging
Accounts Payable	1099 Report	This report shows all relevant 1099 information for each vendor. From this report, the State will generate all 1099 forms for correspondence with their vendors.	1099 Report
Cash Management	Cash Balance by GL Account	This report shows balance totals by period for a cash account or a group of cash accounts. Drilldown capability exists to go to the line items that make up the balances.	Display Balances
Cash Management	Detail Transaction Report	This report shows a line item display for a cash account or a group of cash accounts. These items can be sorted or filtered based upon any of the business objects that are included in the individual line items.	Display Line Items

Functional Area	Report Name	Description	Standard Report/ InfoCube
Asset Accounting	Asset Details Information	This function shows all the values of a fixed asset, including the cost and depreciation, in various forms and summarization levels. Planned values are displayed, as well as values already posted. This function allows users to display and analyze asset values.	Asset Explorer
Asset Accounting	Asset Balances by Cost Center	This report displays values of all assets in a depreciation area. The report has the capability to sort by location, cost center, business area, asset class, and more.	Asset Balances
Asset Accounting	Depreciation by Asset	Ordinary depreciation, unplanned depreciation, and special depreciation that have been posted to the general ledger are displayed by this report.	Posted Depreciation
Asset Accounting	Forecasted Depreciation	This is a report for the simulation of future depreciation. The report date determines the future fiscal year, up to which the simulation should be carried out, or the fiscal year in which simulation to a given period should be carried out.	Depreciation Forecast
Asset Accounting	Asset Additions	This report displays all acquisition documents in a fiscal year by asset.	Asset Acquisitions
Asset Accounting	Asset Retirements	This report displays all retirement documents in a fiscal year period by asset.	Asset Retirements
Asset Accounting	Asset Transfers	This report displays all transfer documents in a fiscal year by asset.	Asset Transfers
Asset Accounting	Asset Detail History	This report makes it possible to view all information on the history of an asset, for example, changes to master data, asset values, or depreciation terms.	Asset History
Asset Accounting	Asset Inventory	This report displays a list of all assets in the system. There are several different versions of this report, which display assets by cost center, location, asset class, or plant.	Physical Inventory List

Functional Area	Report Name	Description	Standard Report/ InfoCube
Travel	Reports by Business Areas, trip, person, GL Account, Cost Center, Fund, etc.	The State requires the ability to report by various fields such as business areas and specific agencies, trip, person and other cost related factors.	Custom Report
Travel	Provide Web-page lookup for employee payments	State requires web-page lookup for employee payments.	Custom Report
Travel	Top 25 travelers, by dollar amount and agency	State requires the ability to generate a query that will capture the top 25 travelers, by dollar amount and agency.	Custom Report
Travel	Total cost by conference	State requires generating a report of total cost by specific events, such as conferences.	Custom Report
Travel	Advances by individual	State requires capturing the total amount of advances by individual.	Custom Report
Travel	Taxable vs. non-taxable travel by employee	State requires generating a report that captures taxable vs. non-taxable travel by employee.	Custom Report
Travel	Information to capture 75/25 rule	State requires information to capture 75/25 rule.	Custom Report
Cost Accounting	Cost Elements (including revenue elements)	This report displays an overview of the costs posted on cost elements by business area or functional area. Since revenue elements are a type of cost element, they are included on this report.	Cost Elements: Breakdown by Business Area & Cost Elements: Allocations Between Company Codes/Business Areas
Cost Accounting	Reconciliation	This report enables the comparison of costs posted on the individual cost elements with the expenses recorded in Financial Accounting. In the report you can search for those accounts for which a reconciliation between Financial Accounting and Controlling is required.	CO/FI Reconciliation
Cost Accounting	Plan/Actual Comparisons	These reports list the actual and planned values for cost-collecting objects in Controlling, such as cost centers, cost elements, and internal orders.	Cost Centers, Cost Elements, Activity Types, SKFs, Internal Orders, & Internal Orders by Cost Element

Functional Area	Report Name	Description	Standard Report/ InfoCube
Cost Accounting	Actual/Actual Comparisons	These reports show actual revenue and expenditure values posted to objects, such as cost centers, cost elements, and internal orders by period or year. These reports allow for the comparison of actual costs from one year or period with those from another year or period.	Cost Centers (quarterly and yearly) & Internal Orders (yearly, quarterly, and by period)
Cost Accounting	Planning Reports	The planning overview displays an overview of planned values on individual objects in Controlling, such as cost centers, cost elements, and internal orders.	Cost Centers: Planning Overview
Cost Accounting	Prices	The price report provides an overview of the activity prices for activity types by cost center.	Cost Centers: Activity Prices
Project Accounting	Capital Reports tracking over multiple years	Capital reports showing a listing of all projects and tracking them over multiple years. Capital reports can be seen with an overall project report and are used to show costs from a large group of projects.	Standard Report – Summarization Report
Project Accounting	Reporting by project, fiscal year, fund, status of encumbrances, cash balances, and cash drawn	These reporting requirements are both managerial and financial and require BW reports, which include PS master data, CO actual costs, and FM budgeting information.	Infocube – Controlling
Project Accounting	Approved budget balance and expenditures by categories	This reporting requirement will show budgetary balances and expenditures by categories and will require infocubes including PS master data, CO actual costs, and FM budgeting information.	Infocube – Controlling
Project Accounting	Actual versus Budgetary Cost Reports	This reporting requirement will show actual versus budgetary cost reports and require infocubes including PS master data, CO actual costs and FM budgeting information.	Infocube – Controlling

Functional Area	Report Name	Description	Standard Report/ InfoCube
Project Accounting	Project Cost Element Reports	These reports show all postings on a project by WBS element. Unlike the hierarchy reports these reports show all cost movement whether by settlement, reposting or allocation. These reports are intended for accounts. This report is based on evaluating project costs and revenues, providing capability to present data in a cost-element based display.	Standard Report – Cost Element Report
Project Accounting	Project Hierarchy Reports	These reports are used primarily by the Project Managers (PM) because the reports are graphically structured just like the WBS structure of a project. These reports ignore ‘internal business’ which is to say they do not show the movement of cost via settlement. This is important because the PM needs to see how much has been charged to a WBS and is not concerned that the costs have actually settled to other receivers in monthly settlement. This report is based on using drill down reports for evaluating the costs, revenues, and payments of one or more projects. It provides capability to drill down on basis of various characteristics and to call up line items and documents.	Standard Report – Hierarchy Report
Project Accounting	Percent Complete Reports	These reports will be able to monitor the % completions for projects.	Standard Report – Progress Report
Project Accounting	Tracking Milestone Reports	These reports will be able to track the status of milestones within a project.	Standard Report – Structure Report
Project Accounting	Forecasted Cash Needs	A report that identifies the forecast needs for each of the projects based on milestones, budgets, and amounts to date.	Custom Report
Grants Management	Grant Budget v. Actual	Grant reports with budget vs. actual required at level to which grants are controlled (Grant, Fund, Sponsored Class, Sponsored Program)	Standard Report – Budget vs. Commitment/Actual
Grants Management	Grant Cash Report	Cash reports by grants and phase to support drawdowns.	InfoCube – Detail Activity

Functional Area	Report Name	Description	Standard Report/ InfoCube
Grants Management	Detail Transaction Report	A report identifying the detail account assignment elements and document details used for ad hoc reporting This will be available through Business Warehouse functions.	InfoCube – Detail Activity
Grants Management	Grant Close-out Report	Final closeout reports displaying grant cash and commitment amounts to verify that cash balance is zero and there are no o/s encumbrances.	Standard Report – Budget vs. Commitment/Actual
Grants Management	Federal Status Reports	Various forms and reports are required by the US government in support of grant reimbursements. Many of the agencies utilize a similar form. For reporting purposes, the generation of the form or the data required to manually prepare the form is being requested.	Custom report (Report Writer) – note: SAP is currently developing some standard federal reports as they enhance the solution.
Grants Management	Schedule of Federal Financial Assistance	The year-end report required for completion that covers all grant activities is identified as the Schedule of Federal Financial Assistance. The report should provide sponsor, grant, external grant number, CFDA number, and financial balances for expenditures, revenues, accounts receivable, and deferred revenue.	Custom report (Report Writer/ABAP) – may consider a new InfoCube to support the requirement.
Purchase Requisitions	Active Requisitions with Fund Expiration	This report will list all purchase requisitions that have an expiring funding source within a specified time range by requisition, commodity, date, fund and location.	Custom Report or InfoCube to be developed.
Purchase Requisitions	WIP Purchase Requisition by Buyer	This report will list all purchase requisitions assigned to a buyer that have yet to be turned into contract or purchase order by buyer code, requisition number, commodity, quantity and date.	Standard Report – List Display of Purchase Requisitions

Functional Area	Report Name	Description	Standard Report/ InfoCube
Purchase Requisitions	Processing Time Report	This report will list the processing time to take a purchase requisition through the full procurement cycle to invoice completion by document type by location.	Custom Report or InfoCube to be developed. 3 Standard InfoCubes exist which could provide basis for customization. InfoCube – Service Level Purchase Orders InfoCube – Service Level Purchase Order Qty InfoCube - Service Level Purchase Order Items
Purchase Orders	Aging Purchase Orders (Management Report)	This report will list purchase orders that have open receipts and/or invoices outside of a specified time frame.	InfoCube – Purchasing Data
Purchase Orders	Minority Progress Report (Required by Procurement Code)	This report will list business activity against minority vendor by commodity, quantity, value, date and location.	Custom report or InfoCube
Purchase Orders	Sole Source	This report will list sole source procurement activity by vendor, commodity, quantity, value, date and location.	InfoCube – Purchasing data
Purchase Orders	Emergency	This report will list emergency procurement activity by vendor, commodity, quantity, value, date and location.	InfoCube – Purchasing data
Purchase Orders	Trade-Ins	This report will list all trade-ins by commodity, vendor, date, quantity, value, description, serial number and new cost.	Custom report or InfoCube
Purchase Orders	Recyclable	This report will list all procurement activity for all commodities that are flagged as recyclable.	Custom report or InfoCube
Purchase Orders	Preferences	This report will list all procurement activity for all South Carolina preference vendors and show value difference with preference applied and not applied.	Custom report or InfoCube

Functional Area	Report Name	Description	Standard Report/ InfoCube
Purchase Orders	Monthly Purchases by Buyer (Management Report)	This report will list all procurement activity per month per buyer code or grouping of buyer codes by commodity, quantity, value and location.	InfoCube – Purchasing groups
Purchase Orders	Lease Expenditures	This report will list all procurement activity for leases by commodity, quantity, date, value and location.	Custom report or InfoCube
Purchase Orders	Contract Expiration Report	This report will list all purchase contracts that will expire within a specified time range by contract number, vendor, commodity, date and location.	Custom Report or InfoCube. Will be based on standard InfoCube – Purchasing Data
Purchase Orders	WIP Purchase Order by buyer (Management Report)	This report will list all purchase orders assigned to a buyer that are still open and in progress by buyer code, purchase order number, commodity, quantity and date.	Standard Report – List Display of Purchase Orders InfoCube – Purchasing Data
Purchase Orders	Processing Time Report (Management Report)	This report will list the processing time to take a purchase requisition through the full procurement cycle to invoice completion by document type by location.	Custom Report or InfoCube to be developed. 3 Standard InfoCubes exist which could provide basis for customization. InfoCube – Service Level Purchase Orders InfoCube – Service Level Purchase Order Qty InfoCube - Service Level Purchase Order Items
Purchase Orders	Value Purchase Orders	This report will list value purchase orders and/or contracts to show remaining $ value left on the document by vendor, PO and/or contract number, by location.	InfoCube – Purchasing data
Purchase Orders	Offshore Vendor Activity	This report will list all procurement activity by offshore vendor, commodity, quantity, date, value and location.	Custom Report or InfoCube. Will be based on standard InfoCube – Purchasing Data
Purchase Orders	Vendor Contract Report	This report will list all contract procurement activity by vendor, contract number, commodity, quantity, date, value and location.	InfoCube – Purchasing data

Functional Area	Report Name	Description	Standard Report/ InfoCube
Purchase Orders	Federal Agency Reports	This report will list all procurement activity that has a Federal funding source by vendor, funding source, commodity, quantity, value, date and location.	Custom report or InfoCube
Purchase Orders	Vendor Compliance Reports	This report will list all compliance activity for vendors based on vendor evaluation criteria in the procurement documents.	InfoCube – Vendor evaluation InfoCube – Vendor evaluation data
Purchase Orders	Unauthorized Purchasing	This report will list all unauthorized procurement activity by buyer, vendor, commodity, quantity, value, date and location.	Custom Report or InfoCube. Will be based on standard InfoCube – Purchasing Data
Purchase Orders	Certified Minority Business	This report will list all vendors that are a certified minority business by vendor name and minority business type.	Custom Report or InfoCube
Purchase Orders	Negotiated Savings	This report will list the negotiated savings for all contract and purchase order negotiations by buyer, vendor, commodity, value, date and location.	Custom Report or InfoCube
Purchase Orders	Interagency (MMO136)	This report will list all procurement activity between agencies which requires the completion of a MMO136 form by agency, commodity, date, quantity and value.	Custom Report or InfoCube
Purchase Orders	Ad–hoc query capability	This is the ability to execute generic queries against procurement transactions within the system.	All available InfoCubes
Inventory Management	Commodity on Hand	This report will show a quantity on hand of a commodity or a listing of commodities by agency and by location.	InfoCube – Materials Movement
Inventory Management	Commodity Consumption	This report will show the consumption of a commodity or listing of commodities by cost center, date and quantity.	InfoCube – Materials Movement
Inventory Management	Commodity Shelf Life	This report will show the defined shelf life of a commodity or a listing of commodities that may be about to reach their shelf life.	Custom report or InfoCube
Inventory Management	MSDS	This report will list commodities that have a MSDS (Material Safety Data Sheet) associated with them.	Custom report or InfoCube

Functional Area	Report Name	Description	Standard Report/ InfoCube
Inventory Management	Commodity Shipping	This report will list commodities that are planned to be shipped out by customer, quantity, date and location.	Custom report or InfoCube
Inventory Management	Commodity Receiving	This report will list commodities that are planned for receipt by vendor, quantity, date and location.	InfoCube – Purchasing Data
Inventory Management	Zero Balance	This report will list commodities that have a zero quantity balance on hand by location.	InfoCube – Materials Movement
Inventory Management	Field Returns	This report will list commodities that have been returned by quantity, date, location and reason.	InfoCube – Materials Movement
Inventory Management	Damages	This report will list commodities that have been damaged by quantity, date, location and reason.	InfoCube – Materials Movement
Inventory Management	Vendor Returns	This report will list commodities that have been returned by vendor, commodity, date, location and reason.	InfoCube – Materials Movement
Inventory Management	Inventory Adjustments	This report will list all inventory adjustments by commodity, quantity, reason and value.	InfoCube – Materials Movement
Inventory Management	Backorders	This report will list commodities that are on backorder by vendor/customer, date and quantity.	InfoCube – Backlogged Order Schedule Lines
Inventory Management	Demand Rates	This report will list commodity activity over a period of time.	InfoCube – Materials Movement
Inventory Management	Charge Backs	This report will list commodity charge backs by quantity, date and responsible cost center.	InfoCube – Materials Movement
Inventory Management	Reorder Points	This report will list commodities and their reorder points by location.	InfoCube – Materials Movement
Inventory Management	Ad-hoc inventory report	This is the ability to execute generic queries against inventory transactions within the system.	InfoCube – Materials Movement
Inventory Management	Turn In Document	This report will identify all the inventory items that have been turned into State Surplus by commodity, quantity, date, location and value.	InfoCube – Materials Movement

4.6.5 Standard InfoCubes Identified for SCEIS Agencies

The following list provides a comprehensive view of the standard infocubes identified in each of the functional areas as available for reporting on agency operations. The table defines the functional area in which the infocube was identified, the name of the infocube, and a brief description.

Exhibit 4.6.5-1 Standard Infocubes Available

Functional Area	InfoCube Name	Purpose/Description
Funds Management	Commitment/Actuals and Budget in Funds Management (BCS)	This cube contains the transaction data on budget of the Budget Control System and commitment/actual postings.
Funds Management	Commitment/Actuals and Budget in Funds Management (Historical)	This cube contains the transaction data on the historical budgeting budget (overall budget, annual budget, periodic budget) and for the assigned funds, as well as commitments/actuals postings. This cube may not be necessary due to the new functionality available in BCS as opposed to the former budgeting tools.
General Ledger	General Ledger (New): Transaction Figures	This InfoCube contains all the detail transaction data from the postings occurring in the general ledger. The infocube includes most of the account assignment elements and fiscal year information.
Accounts Receivable	Accounts Receivable: Line Items	This InfoCube contains information at a header level based on the Accounts Receivable transaction posted in the system. Information on dunning, payment terms, discounts, and document references are included as well.
Accounts Receivable	Accounts Receivable: Payment History	This InfoCube contains the payment history (payment volume and days in arrears) of customers per company code and fiscal year period.
Accounts Receivable	Accounts Receivable: Transaction Data	This InfoCube contains summary activity for a customer based on the detail transaction posted.
Accounts Payable	Accounts Payable: Line Items	This InfoCube contains all the Accounts Payable line items that were processed and the related header level based information. This information includes such items as dunning data, banking information and clearing data.
Accounts Payable	Accounts Payable: Transaction Data	This InfoCube contains all accounts payable data in an annual record form for each of the vendors processed in the solution.
Asset Accounting	Annual Values (planned)	This InfoCube contains the annual values for fixed assets on the basis of planned depreciation.
Asset Accounting	Annual Values (posted)	This InfoCube contains the period values for fixed assets on the basis of posted depreciation.
Asset Accounting	Transactions	This InfoCube contains the detailed transaction line items.

Functional Area	InfoCube Name	Purpose/Description
Asset Accounting	Annual Values and Transactions	This cube is a consolidated set of information containing data on planned depreciations as well as information on posted transactions. It is a consolidation of the Annual Values (planned) and the Transactions cubes identified in asset accounting.
Cost Accounting	Costs and Allocations	This InfoCube contains all costs and quantities on cost centers (plan and actual using delta-extraction) that were transferred from the source system(s). In addition to complete information on variances, the InfoCube also contains the extended partner information (such as the partner cost center with master data) for the allocation relationships. In allocations, the cost center can function as the sender or receiver of activities (quantities) or costs. The cost centers are credited or debited accordingly.
Project Accounting	Controlling	This InfoCube is titled Controlling (since Project Systems is a module within Controlling); however, it contains the transactional data relevant for project systems activities. This includes the master data, actual costs and budgeting information.
Grants Management	Aggregated Key Figures	The InfoCube contains a copy of the information included within the Special Ledger table for Grants Management. This includes statistical values and characteristics for measurement and reporting.
Grants Management	Detail Activity	The cube includes detail financial transaction history for the grant.
Grants Management	Budget Activity	The cube includes the budget activity for the grant including the grant budget, amounts released, and amounts unreleased.
Grants Management	Status Network	This InfoCube contains detail history on the grants lifecycle status changes. The cube includes information on what the current status is for the grant and when the change was made.
Purchase Requisition	Service Level - Purchase Orders	This Cube enables you to evaluate the service level on the level of purchase orders. You can thus analyze, for example, the total number of purchase orders for the share of the purchase orders delivered late.
Purchase Requisition	Service Level - Purchase Order Items	This Cube enables you to evaluate the service level on the level of purchase order items. You can thus analyze, for example, the total number of purchase items for the share of the purchase order items delivered late.
Purchase Requisition	Service Level - Purchase Order Quantities	This Cube enables you to evaluate the service level on the level of purchase order quantities. You can thus analyze, for example, the entire purchase order quantity for the share of the purchase order quantities delivered late.

Functional Area	InfoCube Name	Purpose/Description
Purchase Order and Contract	Purchasing Groups	This InfoCube enables you to analyze the buying activities of your purchasing (buyer) groups. Data on effective order values, invoiced amounts, and number of deliveries is available to you for this purpose. Furthermore, you can obtain an overview of how many documents, document items, and (if applicable) document schedule lines have been created by the purchasing group.
Purchase Order and Contract	Purchasing Data	This InfoCube enables you to carry out analyses of material groups, vendors, and materials. This data enables you to find answers to the following questions, for example: "Which materials and how much of each have been ordered from a certain vendor?" "How many PO items are there for a certain material group?"
Purchase Order and Contract	Vendor Evaluation	This InfoCube enables you to display the scores from the vendor evaluation facility within Purchasing. On the basis of this data, you can compare your vendors with each other and also check whether a certain vendor delivers a material punctually and in the desired quantity for example. Since the scores from the previous period are available in addition to the current score, you can also check whether your vendors' performance is improving or deteriorating.
Purchase Order and Contract	Vendor Evaluation Data	This InfoCube enables you to display the scores from the vendor evaluation facility within Purchasing and thus compare your vendors with each other. Since the scores from the previous period are available in addition to the current score, you can also check whether your vendors' performance is improving or deteriorating.
Purchase Order and Contract	Service Level - Purchase Orders	This Cube enables you to evaluate the service level on the level of purchase orders. You can thus analyze, for example, the total number of purchase orders for the share of the purchase orders delivered late.
Purchase Order and Contract	Service Level - Purchase Order Items	This Cube enables you to evaluate the service level on the level of purchase order items. You can thus analyze, for example, the total number of purchase items for the share of the purchase order items delivered late.
Purchase Order and Contract	Service Level - Purchase Order Quantities	This Cube enables you to evaluate the service level on the level of purchase order quantities. You can thus analyze, for example, the entire purchase order quantity for the share of the purchase order quantities delivered late.
Inventory Management	Material Movements	This InfoCube allows you to evaluate inventory stocks and material movements.
Inventory Management	Slow Moving Items	This MultiProvider enables you to evaluate materials for which no movement has occurred.

Functional Area	InfoCube Name	Purpose/Description
Inventory Management	Backlogged Order Schedule Lines	This InfoCube displays, in the InfoArea Delivery Service (0MMPUR_DLV), an enhancement to the evaluation methods for the theme complex Delivery Service Purchasing, which were delivered for the first time with Release 3.0B. Along with the quantity- and value-based consideration of the backlogged order schedule lines, classifications are also established. Here, the backlogged order schedule lines are uniquely distributed according to the following time periods: 1 day, 7 days, 30 days
Inventory Management	Purchasing Data	This InfoCube allows you to carry out analyses of material groups, vendors, and materials. This data enables you to find answers to the following questions, for example: "Which materials and how much of each have been ordered from a certain vendor?" "How many PO items are there for a certain material group?"